



inferior nutrition

rethinking food storage for
emergency preparedness

How high carbohydrate foods (rice, beans, sugar, pasta, flour, etc.) undermine you and your family's ability to survive food shortages and disaster scenarios.

Ellen Davis, MS

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www.ketogenic-diet-resource.com

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Endorsement

"I've been a prepper for about 10 years and have always had a year's worth of food for me and my family. However, the majority are grains and carbs as many preppers typically store. During the winter of 2015-2016, I was overcome by a digestive illness where I could not eat many of the foods I was used to. Suddenly, I realized my entire food supply was compromised, and I would essentially starve in a SHTF situation while surrounded by food. The only food that got me healthy again was following the Paleo diet and principles outlined in this book.

Take your health seriously now before bad things arise. Ellen's book outlines how a prepper can be more cognitively aware and prepared if they store and eat according to the principles. It's definitely a challenge, but that's the case with any preparations!

Specifically, the best part of this book was the effect of diet during starvation periods. Studies show those who are limited to grains, carbs and processed foods suffer much cognitive and physical impairment while those on a plant, protein and fat based diet had steady state behaviors. If you think about eating a large pasta meal, you know how exhausted your body feels. In a starvation state, those huge influxes of glucose will lead to all kinds of negative aspects spoken of in the book. If

*you want to keep your head on straight during a famine,
take this book to heart. I sure am!"*

~Michael Lopez, OnPointPreparedness.net

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Preface

People who practice emergency preparedness do so because they want a survival advantage during times of crisis. Most prepping blogs and books suggest storing large amounts of grains, flours, sugar, rice, dried beans, potatoes, and powdered milk as major sources of calories in a disaster scenario. The problem is that these high carbohydrate foods aren't compatible with optimal human metabolism during periods of food scarcity. In fact, relying on high carbohydrate foods during periods of calorie restriction can accelerate the metabolic process of starvation.

In this book, I argue that the collective prepping advice on food storage does not support the goal of surviving a disaster in good health. I discuss why high carbohydrate foods are the wrong choice for surviving food shortage situations long-term, how these foods work against the body's natural and protective starvation response, and what to store and eat instead to gain a metabolic advantage in any survival scenario.

My qualifications for writing this book include a Master's degree in Applied Clinical Nutrition. However, while my degree helped me develop and write this book, I think what really qualifies me to present this information is my own direct experience

in following a ketogenic diet and using it to successfully treat my own health problems. Hence, my expertise on the metabolic effects of fasting and ketogenic diets is complimented with extensive practical knowledge on how to apply the diet successfully to optimize health.

I created my website, Ketogenic-Diet-Resource.com to provide others with in-depth and accurate information about the uses, benefits, and research being published on low carbohydrate, high fat diets. I encourage you to visit my website and come to your own conclusions about my knowledge and qualifications.

Finally, if you are on any kind of medication to control blood pressure or blood sugar, be aware that dosages of these drugs will need to be adjusted within days of beginning a ketogenic diet. You may want to have your physician supervise this.

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CHAPTER 1

Two Tales of Hunger

In 1944, an ambitious researcher named Ancel Keys hand-picked 36 young, male volunteers to participate in a year-long study on the effects of starvation. The results were sobering. Twenty-six years later, another scientist named John Yudkin studied a different group of people participating in a study that also limited calories over a period of time, but this study had very different results. The differences in the outcome of these two studies provide strong evidence that when calories are restricted, the composition of the diet makes a big difference in our physical and psychological health.

The 1944 study took place in the basement of the football stadium at the University of Minnesota in Minneapolis. Dubbed the “Great Starvation Experiment,” by author Todd Tucker, it followed 36 healthy, psychologically sound “conscientious objectors” who had volunteered to starve so that Dr. Keys could learn how to help people recover from the famines in war torn Europe. The men agreed to live in the basement of Memorial Stadium on the university campus for a full year¹. During that time, their food intake was strictly controlled by the research team.

There would be a three month period of normal calorie intake each day, followed by a six month period of restricted calories and a final “refeeding” period during the last three months.

The study began on a rainy day in November 1944, and during that first three months, the men were fed normal meals adding up to 3200 calories of fat, protein, and carbohydrate. In February 1945, the second part of the experiment started. For the next six months, they were given approximately 1500 calories of food each day spread out over two meals. Most of their calories came from carbohydrates such as macaroni, potatoes, turnips, and bread. Protein intake was low to adequate and added fat was almost non-existent. Fat intake averaged only 30 grams per day on this new regimen, a fractional amount of what would be provided in a normal diet.

During all phases of the study, Dr. Keys and his team watched the men closely and gathered copious amounts of data on their mental health and physical condition. They also tracked personality and behavioral changes. Cheating was forbidden, but several men broke down and ate other food when they were allowed off campus into the city. As a result, to their great shame, they were booted from the study and the rest of the men were not allowed to leave campus without a “buddy” to ensure that they did not cheat.

During that long six months, the recorded effects of this fat restricted, low calorie diet on the remaining men makes for disturbing and at times, horrifying reading. As calorie and fat intake dropped, the men began to exhibit impaired concentration, judgement, and comprehension. They developed depression, anxiety, irritability, and a lack of interest in world events, while the ongoing war kept everyone else's attention riveted. Their sex drive completely disappeared, and as time progressed, they also lost a great deal of muscle mass, became very weak, and were constantly cold and lightheaded. They also experienced visual and auditory disturbances, and many demonstrated psychotic symptoms. In addition, the men constantly complained about being hungry, and they were utterly obsessed with food, spending hours thinking about how and what they would eat when meal time came. Some developed strange rituals around their meals, and others pored over cookbooks, staring at pictures of food as they turned the pages. Towards the end of the six month period, one man "accidentally" chopped off three of his fingers with an axe in a momentary disconnection from reality while splitting wood. He had picked up the axe in an attempt to keep his mind off food.

During the final phase and the last three months of the study, calorie intake was slowly increased until the men reached normal caloric and nutrient intakes and began to recover the weight that

they had lost. As food and fat intake increased, many of the symptoms of starvation the men had exhibited disappeared. However, there were some residual effects. In a follow up period after the end of the main study, many of the men exhibited behaviors of food hoarding and binging.

The second study was done in 1970. Dr. John Yudkin followed a group of eleven normal subjects to see how following a low carbohydrate, high fat diet would affect their vitamin and mineral intake. The study was in response to criticisms of his successful clinic in which he prescribed low carb diets to help people lose weight and regain their health. Critics insisted that his prescribed diet was lacking in nutrients.

Just as in Minneapolis, Yudkin first had his group eat a normal diet for several weeks. He kept track of nutrient levels, and then switched the group to a low carbohydrate, high fat diet for several weeks. During this second part of the study, Dr. Yudkin told the subjects to eat as much meat, fish, butter, eggs, cheese, and leafy vegetables as they wished, and to not limit calories. However, despite the latitude to eat as much as they wanted, the subjects voluntarily self-limited food intake to about 1500 calories per day, the same amount that the Minnesota group had endured with great misery. When asked about their mental and physical states during the low carbohydrate, low calorie phase, the subjects reported an "increased

feeling of well-being and decreased lassitude.” All of the subjects finished the study in good health and their vitamin and mineral intakes were actually higher during the low carb phase than when they were eating the “normal” diet at the beginning of the study.

While these two studies are not the same in terms of time commitment, the caloric restrictions were the same, and the pointed difference in the state of the subjects’ well-being at the end of each study is a stark lesson to anyone who is concerned about food security in the future.

In this book I’m going to explain why the two groups performed and felt so differently, and why the reasons involved could save your life and the life of your family in a future scenario in which food is scarce. My explanation starts with a few food facts and some basic human biology.

About The Author



Ellen Davis has a master's degree in Applied Clinical Nutrition and has authored articles on the benefits of ketogenic diets for Well Being Journal, Healthy Living and Terry's Naturally.

She created Ketogenic-Diet-Resource.com, a website showcasing the research on the positive health effects of ketogenic diets. Her book Fight Cancer with a Ketogenic Diet has been distributed to over 70 countries, and she also coauthored two popular books on treating diabetes with a ketogenic diet. She currently resides in Cheyenne, Wyoming and can be contacted via email at ask.ellen.davis@gmail.com.

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